

Jordan Valley  
Authority

Computer Business  
Mapping: Loan  
Information Computer  
System

Financial Accounting  
System Program

July 2000



FORWARD

*Collaborative Approaches for Resolving Water Issues*



## Computer Business Mapping Reports:

- Budgeting and Accounting Systems
- Water Management Information System
- Inventory and Workshop Systems
- Land Information System
- ✓ **Loan Information System**
- Personnel and Payroll Systems



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## ACRONYMS

|          |                                       |
|----------|---------------------------------------|
| CBJ      | Central Bank of Jordan                |
| GL       | General Ledger                        |
| H/W      | Hardware                              |
| MOF      | Ministry of Finance                   |
| RDBMS    | Relational Database Management System |
| SMS      | Erno and Shair Management Systems     |
| S/W      | Software                              |
| VARCHAR2 | Variable Character (database type)    |
| WIP      | Work In Progress                      |



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# **CHAPTER 1**

## **INTRODUCTION**

### **Scope**

The purpose of this report is to document from a software perspective our understanding of the current computer system used for financial accounting at the JVA. A detailed description of accounting and of any related terminology and/or procedures is in the business process mapping documents (i.e., Revenue, Expenditures, Budget and Financial Accounting, Inventory and Fixed Assets, Workshop, and Payroll).

### **Methodology**

The information in this report was gathered from the following sources:

- Interviews with end-users (i.e. employees currently using the applications);
- Documentation prepared by Erno and Shair Management Systems (SMS);
- Discussions with the information technology (IT) staff and with members of the oversight committee; and
- A study of the software in place from a functional and structural perspective.

The FAS program team understands and appreciates that the IT sector is very dynamic, so a cut-off date of 31 March was set for collecting information on the systems. Any changes made after that date will not be reflected in this document.

### **Background**

Many JVA projects are financed by loans from foreign donors. Examples include building dams, maintaining dams and canals, making roads, maintaining irrigation projects, investment projects, and tourism projects. Projects can be divided into subprojects and subcontracts and can be funded from various sources, including loan amounts, loan currency, and agency contributions. The loans are long-term and will be paid back with interest.

The loan and project information system is designed to maintain, i.e., insert, update, modify and delete, information on loans, on projects and contracts related to loans, and on invoices and withdrawals of loan fund. Therefore the computer system is used in the "Project Section" of the financial department by one user. However there are no reports that can be printed out from the menu. Whenever a report is needed the IT staff prepares it and prints it out.





## CHAPTER 2

### LOAN INFORMATION SYSTEM MAIN FUNCTIONS

As mentioned previously, invoices and withdrawals for each loan are maintained in this system in order to calculate amounts available. In fact, the system maintains all of the following:

- Code programs
- Loan information
- Projects and related information.
- Contract information
- Invoices, withdrawals and payments.

#### 1. Code Programs

##### 1.1 Agency Data Entry Form

وزارة المياه والري / سلطنة وادي الاردن  
مديرية الشؤون المالية / نظام القروض

ميانة ملف الجهات الممولة

رمز الجهة الممولة :

اسم الجهة الممولة :

In this form agency information that finances loans can be maintained and entered. Each agency has a unique code in the **AGENCY\_CODE\_TABLE**.

| Name        | Data Type    | Null |
|-------------|--------------|------|
| AGENCY_CODE | NUMBER(2)    |      |
| AGENCY_NAME | VARCHAR2(43) |      |

## 1.2 Currency Data Entry Form

This form allows currency information to be entered and stored. The currencies of JVA loans have unique codes in the **CURRENCY\_CODE\_TABLE**.

| Name          | Data Type    | Null |
|---------------|--------------|------|
| CURRENCY_CODE | NUMBER(2)    |      |
| CURRENCY_NAME | VARCHAR2(20) |      |

## 2. Loan Information

### 2.1 Loan Information Data Entry Form

**نظم إمام القروض**  
صفحة معلومات القروض

رسم الائتمان

تاريخ توقيع القرض

فترة السماح بالانقضاء  عدد الاقساط  سعر الفائدة

تاريخ بدء القرض  يوم شهر سنة

آخر تاريخ مسموح للمدفعة  يوم شهر سنة

ملاحظات القرض

الرجوع للشاشة السابقة

Information on loans and financing agencies is entered from this form and date stored in the **LOAN\_MASTER** table as follows:

| Name                     | Data Type    | Null |
|--------------------------|--------------|------|
| LOAN_CODE                | VARCHAR2(10) |      |
| LOAN_NAME                | VARCHAR2(60) |      |
| LOAN_AGENCY_CODE         | NUMBER(2)    |      |
| LOAN_AMOUNT              | NUMBER(12)   |      |
| LOAN_AMOUNT_BASE         | NUMBER(12)   |      |
| LOAN_BASE_D              | NUMBER(2)    |      |
| LOAN_BASE_M              | NUMBER(2)    |      |
| LOAN_BASE_Y              | NUMBER(4)    |      |
| LOAN_OTHERS              | NUMBER(1)    |      |
| LOAN_OTHERS_AMOUNT       | NUMBER(9)    |      |
| LOAN_CURR_CODE           | NUMBER(2)    |      |
| LOAN_CONVET_RATE         | NUMBER(8,4)  |      |
| LOAN_REPAYMENT_CURR      | NUMBER(2)    |      |
| LOAN_INTEREST_RATE       | NUMBER(5,3)  |      |
| LOAN_COMMITMENT_FEE      | NUMBER(5,3)  |      |
| LOAN_LAST_DRAW_ALLOWED_D | NUMBER(2)    |      |
| LOAN_LAST_DRAW_ALLOWED_M | NUMBER(2)    |      |
| LOAN_LAST_DRAW_ALLOWED_Y | NUMBER(4)    |      |
| LOAN_LAST_WITHDRAW_D     | NUMBER(2)    |      |
| LOAN_LAST_WITHDRAW_M     | NUMBER(2)    |      |
| LOAN_LAST_WITHDRAW_Y     | NUMBER(4)    |      |
| LOAN_SIGN_D              | NUMBER(2)    |      |
| LOAN_SIGN_M              | NUMBER(2)    |      |
| LOAN_SIGN_Y              | NUMBER(4)    |      |
| LOAN_GRACE_PERIOD        | NUMBER(3)    |      |
| LOAN_NO_INSTALLMENTS     | NUMBER(3)    |      |
| LOAN_TOT_PAYMENTS        | NUMBER(15,3) |      |
| LOAN_TOT_REPAYMENTS      | NUMBER(12,3) |      |
| LOAN_TOT_PAID_INT        | NUMBER(12,3) |      |

| Name                 | Data Type    | Null |
|----------------------|--------------|------|
| LOAN_FIRST_PAYMENT_D | NUMBER(2)    |      |
| LOAN_FIRST_PAYMENT_M | NUMBER(2)    |      |
| LOAN_FIRST_PAYMENT_Y | NUMBER(4)    |      |
| LOAN_AIM             | VARCHAR2(40) |      |

## 2.2 Goods and Loan Services Data Entry Form

The screenshot shows a web-based data entry form titled 'نظام القروض' (Loan System). It contains the following elements:

- Header: 'نظام القروض' (Loan System)
- Sub-header: 'قائمة الإقراض والخدمات' (Loan Details and Services)
- Form Fields:
  - 'رقم القرض:' (Loan Number): A text input field.
  - 'اسم صلة القرض:' (Loan Relationship Name): A text input field.
- Data Entry Tables:
  - 'المخصصات' (Allocations): A table with 10 rows and 1 column.
  - 'تفاصيل الإقراض والخدمات' (Loan Details and Services): A table with 10 rows and 1 column.

Service terms and conditions information is entered from this form and data is stored in the **GOODS\_SERVICES** table as follows:

| Name           | Data Type    | Null |
|----------------|--------------|------|
| LOAN_CODE      | VARCHAR2(10) |      |
| LOAN_CURR_CODE | NUMBER(2)    |      |
| CONTRACT_NAME  | VARCHAR2(40) |      |
| RESERVATION    | NUMBER(13,3) |      |

### 3. Projects and Related Loan Information

#### 3.1 Project Information Data Entry Form

This master / detail data entry form is composed of BASIC\_CONTRACT and BASIC\_AGENCY tables. The master table **BASIC\_CONTRACT** holds information about JVA projects financed by loans as follows:

| Name              | Data Type    | Null |
|-------------------|--------------|------|
| BAS_CONTRACT_CODE | VARCHAR2(15) |      |
| BAS_CONTRACT_NAME | VARCHAR2(40) |      |
| BAS_CONTRACT_D    | NUMBER(2)    |      |
| BAS_CONTRACT_M    | NUMBER(2)    |      |
| BAS_CONTRACT_Y    | NUMBER(4)    |      |
| BAS_CONTRACT_AM1  | NUMBER(12,3) |      |
| BAS_CURR_CODE1    | NUMBER(2)    |      |
| BAS_CONTRACT_AM2  | NUMBER(12,3) |      |
| BAS_CURR_CODE2    | NUMBER(2)    |      |
| BAS_CONTRACT_AM3  | NUMBER(12,3) |      |
| BAS_CURR_CODE3    | NUMBER(2)    |      |

Financial support for the project can be from more than one loan. This information is stored in the **BASIC\_AGENCY** table in the following manner:

| Name              | Data Type    | Null |
|-------------------|--------------|------|
| FIN_CONTRACT_CODE | VARCHAR2(15) |      |
| FIN_LOAN_CODE     | VARCHAR2(10) |      |
| FIN_AMOUNT        | NUMBER(12,3) |      |
| FIN_CURR_CODE     | NUMBER(2)    |      |
| FIN_CONTRIBUTION  | NUMBER(5,2)  |      |

## 4. Contract Information

### 4.1 Contract Information Data Entry Form

The form is titled "نظام الفروع" (Branch System) and "معالجة معلومات العقود" (Contract Information Processing). It contains various input fields for contract details, including project code, contract code, contract date, contractor name, contractor address, contract amount, and contractor account. The form is organized into sections with labels in Arabic.

This is a master / detail data entry form composed of **CONTRACTS** and **FINANCE\_AGENCIES** tables that allows the user to enter information about contracts and subcontracts for a project and to define the executive company (person), his address, the contract amount and the currency of the loan. The **CONTRACTS** table is as follows:

| Name                     | Data Type    | Null |
|--------------------------|--------------|------|
| CONTRACT_CODE            | VARCHAR2(15) |      |
| CONTRACT_SUB_CODE        | NUMBER(3)    |      |
| CONTRACT_SUB_NAME        | VARCHAR2(90) |      |
| CONTRACT_DATE_D          | NUMBER(2)    |      |
| CONTRACT_DATE_M          | NUMBER(2)    |      |
| CONTRACT_DATE_Y          | NUMBER(4)    |      |
| CONTRACTOR_NAME          | VARCHAR2(90) |      |
| CONTRACTOR_ADDRESS1      | VARCHAR2(30) |      |
| CONTRACTOR_ADDRESS2      | VARCHAR2(30) |      |
| CONTRACTOR_ADDRESS3      | VARCHAR2(30) |      |
| CONTRACT_AMOUNT1         | NUMBER(12,3) |      |
| CONTRACT_AMOUNT2         | NUMBER(12,3) |      |
| CONTRACT_AMOUNT3         | NUMBER(12,3) |      |
| CONTRACT_CURR_CODE1      | NUMBER(2)    |      |
| CONTRACT_CURR_CODE2      | NUMBER(2)    |      |
| CONTRACT_CURR_CODE3      | NUMBER(2)    |      |
| CONTRACTOR_ACCOUNT_NO    | VARCHAR2(15) |      |
| CONTRACTOR_BANK_NAME     | VARCHAR2(30) |      |
| CONTRACTOR_BANK_ADDRESS1 | VARCHAR2(30) |      |
| CONTRACTOR_BANK_ADDRESS2 | VARCHAR2(30) |      |
| CONTRACTOR_BANK_ADDRESS3 | VARCHAR2(30) |      |

| Name                    | Data Type    | Null |
|-------------------------|--------------|------|
| CONTRACT_DOWN_PAYMENTS1 | NUMBER(12,3) |      |
| CONTRACT_DOWN_PAYMENTS2 | NUMBER(12,3) |      |
| CONTRACT_DOWN_PAYMENTS3 | NUMBER(12,3) |      |
| CONTRACT_DOWN_PAY_CURR1 | NUMBER(2)    |      |
| CONTRACT_DOWN_PAY_CURR2 | NUMBER(2)    |      |
| CONTRACT_DOWN_PAY_CURR3 | NUMBER(2)    |      |
| CONTRACT_FLAG           | NUMBER(1)    |      |

The **FINANCE\_AGENCIES** table holds information about loans related to specific projects and subcontracts.

| Name                     | Data Type    | Null |
|--------------------------|--------------|------|
| FINANCE_LOAN_CODE        | VARCHAR2(10) |      |
| FINANCE_CONTRACT_CODE    | VARCHAR2(15) |      |
| FINANCE_AMOUNT           | NUMBER(12,3) |      |
| FINANCE_CURR_CODE        | NUMBER(2)    |      |
| FINANCE_CONTRIBUTION     | NUMBER(5,2)  |      |
| FINANCE_SUBCONTRACT_CODE | NUMBER(2)    |      |

## 5. Invoices, Withdrawals and Loan Payments

### 5.1 Invoices For Loan Payments Data Entry Form

When a contractor works on a project, he issues invoices according to contract payment conditions. Invoice information is entered from this form and data is stored in the **INVOICES** table as follows:

| Name                  | Data Type    | Null |
|-----------------------|--------------|------|
| INVOICE_NO            | NUMBER(4)    |      |
| INVOICE_CONTRACT_CODE | VARCHAR2(15) |      |

| <b>Name</b>              | <b>Data Type</b> | <b>Null</b> |
|--------------------------|------------------|-------------|
| INVOICE_SUB_CODE         | NUMBER(2)        |             |
| INVOICE_LOAN_CODE        | VARCHAR2(10)     |             |
| INVOICE_D                | NUMBER(2)        |             |
| INVOICE_M                | NUMBER(2)        |             |
| INVOICE_Y                | NUMBER(4)        |             |
| INVOICE_PAY_D            | NUMBER(2)        |             |
| INVOICE_PAY_M            | NUMBER(2)        |             |
| INVOICE_PAY_Y            | NUMBER(4)        |             |
| INVOICE_CHAPTER_CODE     | NUMBER(2)        |             |
| INVOICE_CHAPTER_TYPE     | VARCHAR2(1)      |             |
| INVOICE_PROGRAM_CODE     | VARCHAR2(1)      |             |
| INVOICE_PROJECT_CODE     | NUMBER(2)        |             |
| INVOICE_GROUP_CODE       | NUMBER(3)        |             |
| INVOICE_ITEM_CODE        | NUMBER(2)        |             |
| INVOICE_AMOUNT           | NUMBER(12,3)     |             |
| INVOICE_CURR             | NUMBER(10,6)     |             |
| INVOICE_CONV_RATE        | NUMBER(10,6)     |             |
| INVOICE_TYPE             | NUMBER(1)        |             |
| INVOICE_PERFORM_WORK     | NUMBER(12,3)     |             |
| INVOICE_VARIATION_ORDER  | NUMBER(12,3)     |             |
| INVOICE_MATERIAL_SITE    | NUMBER(12,3)     |             |
| INVOICE_ADVANCES         | NUMBER(12,3)     |             |
| INVOICE_DOWN_PAY_PAID    | NUMBER(12,3)     |             |
| INVOICE_DEDUCTIONS       | NUMBER(12,3)     |             |
| INVOICE_CURRIED_PAYMENTS | NUMBER(16,3)     |             |
| INVOICE_OTHER_DEDUCTION  | NUMBER(12,3)     |             |
| INVOICE_STATUS           | VARCHAR2(1)      |             |
| INVOICE_NO_EXT           | VARCHAR2(25)     |             |
| INVOICE_JD_AMOUNT        | NUMBER(12,3)     |             |
| DISTRIB_FLAG             | NUMBER(1)        |             |

Construction invoices are cumulative, i.e., each one contains previous charges. Therefore, the most recent invoice reflects the total amount charged to the project to date. When cumulative invoices are entered from this form then the total amount of the invoice is automatically calculated and is stored in the INVOICE\_OUT table.



## 5.2 Query on Invoices Data Form

This form retrieves invoices data from the **INVOICE\_OUT** table which has the following description:

| Name                      | Data Type    | Null |
|---------------------------|--------------|------|
| INVOICE1_NO               | NUMBER(4)    |      |
| INVOICE1_CONTRACT_CODE    | VARCHAR2(15) |      |
| INVOICE1_SUB_CODE         | NUMBER(2)    |      |
| INVOICE1_LOAN_CODE        | VARCHAR2(10) |      |
| INVOICE1_D                | NUMBER(2)    |      |
| INVOICE1_M                | NUMBER(2)    |      |
| INVOICE1_Y                | NUMBER(4)    |      |
| INVOICE1_AMOUNT           | NUMBER(12,3) |      |
| INVOICE1_CURR             | NUMBER(2)    |      |
| INVOICE1_PERFORM_WORK     | NUMBER(12,3) |      |
| INVOICE1_VARIATION_ORDER  | NUMBER(12,3) |      |
| INVOICE1_MATERIAL_SITE    | NUMBER(12,3) |      |
| INVOICE1_ADVANCES         | NUMBER(12,3) |      |
| INVOICE1_DOWN_PAY_PAID    | NUMBER(12,3) |      |
| INVOICE1_DEDUCTIONS       | NUMBER(12,3) |      |
| INVOICE1_CURRIED_PAYMENTS | NUMBER(16,3) |      |
| INVOICE1_OTHER_DEDUCTION  | NUMBER(12,3) |      |
| INVOICE1_FINANCIAL_PART   | NUMBER(12,3) |      |
| INVOICE1_LOAN_PART        | NUMBER(12,3) |      |
| INVOICE1_FLAG             | VARCHAR2(1)  |      |
| INVOICE1_NO_EXT           | VARCHAR2(25) |      |

The form has the option to confirm an invoice. When invoice is confirmed then the **UPDATE\_INVOICES** table will be amended. This table reflects the most recent invoice information for the project as follows:

| Name                      | Data Type    | Null |
|---------------------------|--------------|------|
| INVOICE2_CONTRACT_CODE    | VARCHAR2(15) |      |
| INVOICE2_SUB_CODE         | NUMBER(2)    |      |
| INVOICE2_LOAN_CODE        | VARCHAR2(10) |      |
| INVOICE2_D                | NUMBER(2)    |      |
| INVOICE2_M                | NUMBER(2)    |      |
| INVOICE2_Y                | NUMBER(4)    |      |
| INVOICE2_AMOUNT           | NUMBER(12,3) |      |
| INVOICE2_CURR             | NUMBER(2)    |      |
| INVOICE2_PERFORM_WORK     | NUMBER(12,3) |      |
| INVOICE2_VARIATION_ORDER  | NUMBER(12,3) |      |
| INVOICE2_MATERIAL_SITE    | NUMBER(12,3) |      |
| INVOICE2_ADVANCES         | NUMBER(12,3) |      |
| INVOICE2_DOWN_PAY_PAID    | NUMBER(12,3) |      |
| INVOICE2_DEDUCTIONS       | NUMBER(12,3) |      |
| INVOICE2_CURRIED_PAYMENTS | NUMBER(12,3) |      |
| INVOICE2_OTHER_DEDUCTION  | NUMBER(12,3) |      |
| INVOICE2_FINANCIAL_PART   | NUMBER(12,3) |      |
| INVOICE2_LOAN_PART        | NUMBER(12,3) |      |
| INVOICE2_FLAG             | VARCHAR2(1)  |      |

### 5.3 Monthly Invoices for Loan Payments Data Entry Form

نظام القروض

امثال المطالبات الشهرية للقروض

رقم المطالبة الشاملة :

رمز المشروع :

رمز العقد القرضي :

تاريخ التوقيع بالنقد :

رقم القرض :

رمز صلة المطالبة :

مسحور التعداد :

تفاصيل المطالبة

توقيع :

ملاحظات :

ملاحظات اخرى :

مجموع دفعات سابقة :

قيمة المطالبة :

الاولى للتعبئة :

بقية :

صافي المطالبة :

توزيع القرض :

توزيع الخزانة :

صافي المطالبة بالدينار :

This form maintains monthly (non-cumulative) invoices and the related distribution of each. Related distribution means that each invoice may be split into sub invoices that may be paid in different currencies and percentages according to loan and contract conditions. Information on invoices is stored in the INVOICE\_OUT table, and information on the distribution of invoices on loan currencies is stored in the **DISTRIB\_INV\_CURR** table. The part of invoice distribution is now under programming development and the table has the following description:

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## 5.4 Withdrawal from Loans

نظام القروض

عمليات السحب من القروض

رقم القرض :

تاريخ السحب :

رقم طلب السحب :

رمز المشروع :

رمز العقد الفرعي :

رقم المطالبة :

رقم المطالبة المتضمن :

صلة المطالبة :

تاريخ مطالبة :

مبلغ المطالبة :

نسبة :  % مبلغ النسبة من المطالبة :

مبلغ المسحوب :

معدل القروض :

المبلغ المنفوع مع الفوائد :

صولة :

صلة الفتح :

رقم الإصدار :

تاريخ الإصدار بالفتح :

رصيد القرض :

A withdrawal notice is prepared for each invoice to inform the financing agency of the amount to be paid from that loan. The information is stored in the **WITHDRAWALS** table as follows:

| Name                   | Data Type    | Null |
|------------------------|--------------|------|
| WITHDRAW_LOAN_CODE     | VARCHAR2(10) |      |
| WITHDRAWAL_D           | NUMBER(2)    |      |
| WITHDRAWAL_M           | NUMBER(2)    |      |
| WITHDRAWAL_Y           | NUMBER(4)    |      |
| WITHDRAW_CONTRACT_CODE | VARCHAR2(15) |      |
| WITHDRAW_SUB_CODE      | NUMBER(2)    |      |
| WITHDRAWAL_AMOUNT      | NUMBER(12,3) |      |
| WITHDRAW_CHAPTER_CODE  | NUMBER(2)    |      |
| WITHDRAW_CHAPTER_TYPE  | VARCHAR2(1)  |      |
| WITHDRAW_PROGRAM_CODE  | VARCHAR2(1)  |      |
| WITHDRAW_PROJECT_CODE  | NUMBER(2)    |      |
| WITHDRAW_GROUP_CODE    | NUMBER(3)    |      |
| WITHDRAW_ITEM_CODE     | NUMBER(2)    |      |
| WITHDRAW_SERIAL_NO     | NUMBER(3)    |      |
| WITHDRAW_INVOICE_NO    | NUMBER(4)    |      |
| WITHDRAW_ADVICE_NO     | NUMBER(4)    |      |
| WITHDRAW_ADVICE_D      | NUMBER(2)    |      |
| WITHDRAW_ADVICE_M      | NUMBER(2)    |      |
| WITHDRAW_ADVICE_Y      | NUMBER(4)    |      |
| WITHDRAW_AIM           | VARCHAR2(30) |      |
| WITHDRAWAL_CURR_CODE   | NUMBER(2)    |      |
| WITHDRAWAL_CURR_PAY    | NUMBER(2)    |      |
| WITHDRAW_AMOUNT_PAY    | NUMBER(12,3) |      |
| WITHDRAW_INV_NO_EXT    | VARCHAR2(25) |      |
| WITHDRAW_AMOUNT        | NUMBER(12,3) |      |

| <b>Name</b>             | <b>Data Type</b> | <b>Null</b> |
|-------------------------|------------------|-------------|
| WITHDRAW_CURR           | NUMBER(2)        |             |
| WITHDRAW_PERSENT        | NUMBER(7,3)      |             |
| WITHDRAW_PERSENT_AMOUNT | NUMBER(12,3)     |             |
| WITHDRAW_CURR_RATE      | NUMBER(8,6)      |             |
| WITHDRAW_LOAN_CHARGES   | NUMBER(12,3)     |             |



## CHAPTER 3

### LOAN MAIN FUNCTIONS AND RELATED DATABASE

The computer system is comprised of the following functions and programs:

**Table 3.1**  
**Loan System Functions and Programs**

| Function Area                         | Program Name |
|---------------------------------------|--------------|
| Loan information                      | LOAN         |
| Goods and Loan services               | GDS_SERV     |
| Project Information                   | BAS_CNT      |
| Contract Information                  | CONTRAC      |
| Invoices for loan payments            | INVOICE      |
| Queries on invoices and loan payments | INVO_INQ     |
| Monthly invoices for loan payments    | INVO_MTH     |
| Withdrawals from loans                | WITHDRAW     |

The table below summarizes the information contained in the loan system.

**Table 3.2**  
**Description of Data in the Loan System**

| Program Name | Basic Table(s)                          |
|--------------|---|
| LOAN         | LOAN_MASTER                             |
| GDS_SERV     | GOODS_SERVICES                          |
| BAS_CNT      | BASIC_CONTRACT, BASIC_AGENCY            |
| CONTRAC      | CONTRACTS, FINANCE_AGENCIES             |
| INVOICE *    | INVOICES, INVOICE_OUT                   |
| INVO_INQ *   | INVOICE_OUT, UPDATED_INVOICES           |
| INVO_MTH     | INVOICES, INVOICE_OUT, DISTRIB_INV_CURR |
| WITHDRAW     | WITHDRAWALS, LOAN_MASTER                |

\* These forms are not used by the end user since they are related to cumulative invoices.

Figure 3.1 tracks data flow in the loan information system.

**Figure 3.1**  
**Loans System Data Flow**

